Docket Item #9A&B DEVELOPMENT SITE PLAN #2004-0038(A)

SUBDIVISION #2006-0006(B)

TAFT AVENUE

Planning Commission Meeting February 6, 2007

**REQUEST:** Consideration of (1) a request for a development site plan, with

modifications, to construct thirteen (13) single-family dwellings and (2) a

request to resubdivide 5 lots.

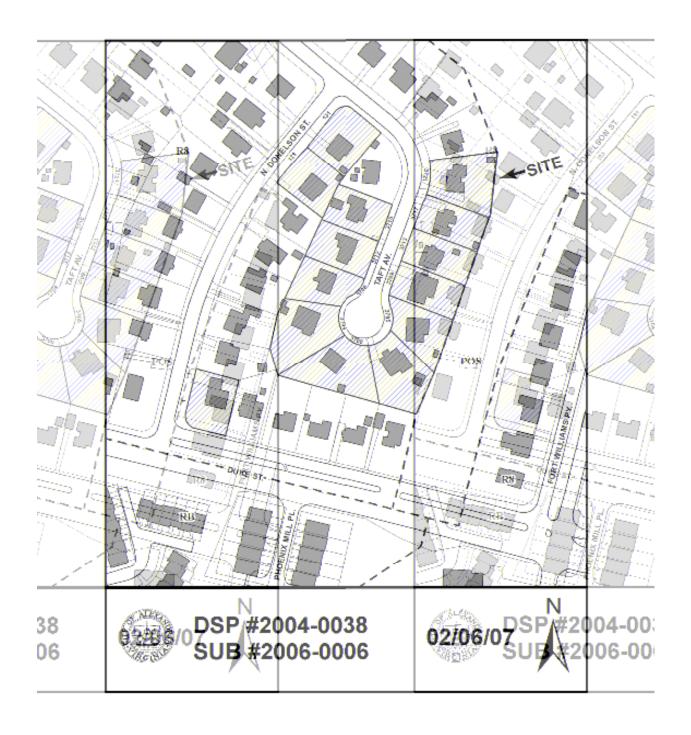
**APPLICANT:** Calvert Homes, Inc.

by Kelly Atkinson

**LOCATION:** 1, 123, and 131 North Donelson Street and 3700, 3704, 3705, 3708, 3709,

3712, 3713, 3716, 3717, and 3721 Taft Avenue

**ZONE:** R-8/Residential



# I. <u>EXECUTIVE SUMMARY</u>

The applicant is requesting approval of a development site plan and subdivision to construct thirteen single-family homes. The proposed homes will be located within an established neighborhood of primarily one-story single-family homes which were constructed in the 1950's. The applicant proposes to demolish the thirteen existing homes and resubdivide five of the existing lots to enable thirteen new single-family homes to be constructed.

The applicant initially approached the City with a proposal to construct the homes on the existing lots with front loaded garages and numerous yard modifications. In early discussions with the applicant, staff indicated that the applicant would need to revise the project to address the yard modifications, comply with the interim infill requirements (threshold height and front setback),

explore options to provide side-loaded garages rather than front-loaded garages, retain some of the mature trees on many of the lots, improve the adjoining streetscape in front of each lot, and provide a pedestrian connection to the adjoining Fort Williams Park. In response, the applicant has worked with staff to revise the plan in the following ways:

- side-loaded garages for twelve of the units;
- retention of many of the mature trees;
- sidewalk and streetscape improvements;
- demonstrated compliance with the infill regulations; and
- a landscaped pedestrian connection to Fort Williams Park including signage.

The applicant has worked in good faith with staff and the community to provide site plan elements such as tree preservation, streetscape improvements, side-loaded garages, and pedestrian connections to open space, and is also proposing



Figure 1: Site Plan in Aerial



Figure 2: Existing Homes and Stream Area



Figure 3: Proposed Elevation - Croftwood

stream restoration for Strawberry Run, which is within Fort Williams Park, all of which are very positive elements consistent with the direction established by the Commission. While the height and size of the homes are within the amount permitted by the R-8 zone, these 2,700-3,400 sq. ft. homes are considerably larger and taller than the existing 900-1,400 sq.ft. 10-15 feet tall single level homes which they are replacing. This proposal represents all of the challenges of infill redevelopment and the volume of building permitted by the existing zoning.

Staff is recommending approval because with the staff recommendations the proposal complies with the provisions of the R-8 zone and the interim infill regulations.

### A. Infill

The proposed development raises numerous issues often discussed as part of infill discussions-appropriate scale, "tear downs", compatibility, and zoning rights. While the footprints of the proposed homes are 25% larger than the existing homes, the proposed two story homes will be 10-15 feet taller than the existing homes. However, the new homes comply with the zoning for the neighborhood and the City's interim infill regulations. Whether the City's regulations *should* prohibit the rebuilding in this or other non-historic neighborhoods with larger buildings is a question that should be considered as part of the upcoming infill study, and this case raises several relevant questions, such as:

- Are the proposed large houses out of scale or "character"? To determine the answer, what should they be compared to? The houses they are replacing?
- Should the City seek to retain small houses to preserve variety in the housing stock?
- Should there be a limit on height of new homes or of mass in an established neighborhood?
- Should an SUP be required in such cases?





Figure 4: Existing and Proposed Homes

While these are all good questions and difficult ones, the City's current regulations do not permit anything but approval of new larger homes replacing smaller ones, provided they comply with zoning, site plan and subdivision regulations, and the interim infill regulations. Single-family homes are a permitted use in the R-8 zone and a preferred use in the Seminary Hill/Strawberry Hill small area plan.

### B. Resource Protection Area (RPA)

Five of the existing homes are located within the Resource Protection Area (RPA). While the applicant is proposing to reconstruct five units within the RPA, by pulling the new homes closer

to Taft Avenue, the amount of impervious surface within the RPA decreases compared to the existing homes. The Zoning Ordinance permits redevelopment within the RPA provided:

- The use is permitted in the zone and is consistent with the Master Plan;
- A water quality impact assessment is accepted by the Director of T&ES;
- No increase in impervious surface cover and no further encroachment;
  and
- Compliance with the City's Erosion and Sediment Control and applicable state and federal stormwater management requirements.



Figure 5: Strawberry Run RPA

# C. Zoning Modifications

Staff supports the side yard modifications because they are relatively small (1 - 6.5 feet) and it enables the garage doors to be located on the side of the homes. Having garage doors on the front of the homes would be incompatible with the character of the neighborhood. Furthermore, side-loaded garages provide a more pleasant streetscape for pedestrians.

# D. Community

Staff has met with both the Strawberry Hill and Seminary Hill neighborhoods to discuss the project. The proposal was met with interest and support generally, as well as a willingness to help with the stream restoration project. Many of the adjoining residents have expressed a strong desire to see the proposal proceed. A petition supporting the proposal which is attached has been signed by 25 of the adjoining property owners.

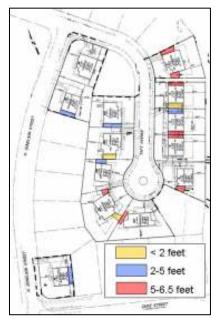


Figure 6: Requested Modifications

## II. <u>BACKGROUND</u>

# A. Site Description

The proposal entails development of thirteen existing single-family lots in the Seminary Hill/Strawberry Hill planning area. Ten of the lots are located at the end of Taft Avenue around the existing cul-de-sac, two are located on North Donelson Street near the intersection of Taft Avenue, and one is located at the corner of North Donelson Street and the service road parallel to Duke Street. The existing lots range from 8,000 sq.ft. to 12,000 sq.ft. The lots are currently developed with one story single-family homes that were built in the 1950's and range in size from 876 sq.ft to 1,420 sq.ft., and range in height from 10 to 15 feet.

The neighborhood is composed entirely of single-family dwellings, which were all constructed as part of the original development in the 1950's. This is an area that was incorporated into the City in 1952. Beyond the immediate project area, to the east, west, and south along Duke Street, are townhouse developments. To the immediate east of the project is Fort Williams Park which runs north and south behind the homes on Fort Williams Parkway and includes Strawberry Run.

# **B.** Project Description

This project had originally come to the City as separate applications and staff requested they be combined into one site plan application to ensure a cohesive development plan, sufficient community involvement, and coordination between each lot.

Five of the thirteen lots will be resubdivided so that the resulting lots will be more uniform and more regular in shape and so they can accommodate the larger homes being proposed. The average lot size will increase slightly from 9,046 sq.ft to 9,062 sq.ft., and the average house size will be 2,978 sq.ft. which is below the average 0.35 FAR requirement. The current traffic circulation will be maintained, with the cul-de-sac at the end of Taft Avenue. Access to the Fort Williams Park to the east will still be available through the ten foot wide City owned strip of



Figure 7: Aerial



Figure 8: N. Donelson Street Homes



Figure 9: Site Plan

land between Lot 12 and Lot 13. Improvements to Strawberry Run are proposed as part of a stream restoration plan, which is discussed below.

### C. Resubdivision

As indicated above, part of this application includes a resubdivision. Of the thirteen original lots, five are proposed for resubdivision. Original Lots 18, 19, 20, 21, and 22, which are on the west side of Taft Avenue. will be resubdivided into five new lots with increases in size to original Lots 19, 21, and 22 (Lots 506, 504, and 503), and decreases in size to original lots 18 and 20 (Lots 507 and 505). Each of the new lots meet the minimum lot size of 8,000 sq.ft. and the minimum frontage of 40 feet. The eight other lots (Lots 12, 13, 14, 15, 16, 29, 30, and 36) will remain the same and are not included in the resubdivision.

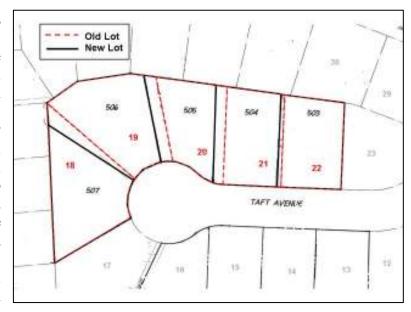


Figure 10: Subdivision

# III. ZONING

Property Address:	Taft Avenue and North Donelson Street
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Total Site Area: 117,812 sq.ft. (2.70 Acres)

Zone: R-8/Residential

Current Use: 13 Single-Family Residences

Proposed Use: 13 Single-Family Residences

	Permitted/Required	<u>Proposed</u>
Lot Size:	8,000 sq.ft. for standard lots and 9,000 sq.ft. for corner lots	8,016 sq.ft. – 11,790 sq.ft.
FAR:	0.35	0.26 - 0.35
Yards:		
Front:	30 feet	30.3 to 38.4 feet
Side:	13.54 to 14.76 feet (1:2)	8.2 to 33.7 feet *
Rear:	27.07 to 29.52 feet (1:1)	27.7 to 54.2 feet
Height:	35 feet	27.07 to 29.52 feet
Parking:	2 spaces per dwelling unit	2 spaces per dwelling unit (garage)
Open Space:	n/a	4,998 – 8,817 SF/lot

<sup>\*</sup> Modifications requested – Lots 12, 13, 14, 15, 16, 503, 504, 505, 506, 507, 30, and 36.

# IV. STAFF ANALYSIS

Staff recommends approval of the proposed development site plan and resubdivision. The proposal generally complies with the R-8 zoning and the applicant has worked with the City and community to address many of the compatibility and environmental issues that pertain to the project. While some modifications are necessary, these fairly minimal modifications are necessary to have the side-loaded garages requested by staff. These issues, which include infill, building compatibility, modifications, subdivision, development in the RPA, stream restoration, tree retention, streetscape, and community response, are discussed below.

## A. Interim Infill Regulations

To address the infill issue on an interim basis while longer term solutions are studied, the City recently adopted two regulations which are designed to capture the most egregious cases of incompatible infill:

- The front door threshold height may not exceed the average threshold height of the existing surrounding homes by more than 20% unless a special use permit is approved.
- The front setback must be compatible with the existing character of the neighborhood.

### Front door threshold height

The requirement within Section 7-1002 (B) states "Whenever the major portion of a block is developed, no front door threshold of a single-family, two-family or townhouse residential building erected or altered after June 27, 2006 shall exceed the average height of the front door threshold of the residential buildings built on that block (one side of a street between two intersecting streets or one intersecting street and a street dead end) by more than 20 percent, provided that additional front door threshold height may be permitted if a special use permit is approved pursuant to section 11-500 of this ordinance, and city council determines that the proposed construction will not detract from the value of and will be of substantially the same residential character as adjacent and nearby properties."

This provision was added to ensure that developers do not artificially raise natural grade to make the appear larger homes which in turn makes the grade and the home much different than the adjoining homes. In this case, given the size of the project, there were actually three "blocks." On one of those "blocks" (shown as Block B on the graphic), the majority of

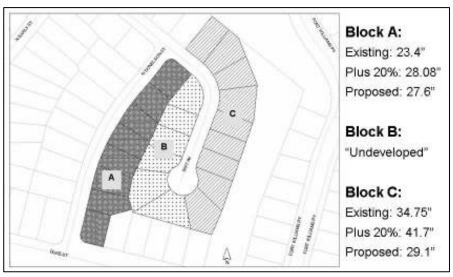


Figure 11: Threshold Height by "Blocks"

the buildings will be demolished resulting in a block without developed thresholds, so the rule would not apply. Applying the rule to the other two blocks results in a finding that no SUP is required. While these are large homes, the existing grading will generally remain as exists today with the homes being approximately 2 feet above the adjoining grade. As depicted in the graphic, none of the front door thresholds exceed 20% of the existing homes.

#### Front Setback

Section 7-1002 (A) states "...wherever the major portion of a block is developed, and the majority of the buildings built on one side of a street between two intersecting streets or between one intersecting street and a street dead end have been built with a different minimum setback than prescribed for the zone in which such buildings are located, no residential building hereafter erected or altered shall project beyond the minimum setback line so established...".

The front yard setback for the R-8 zone is 30 feet. The existing homes within this subdivision are generally set back 30 feet from the property lines. With regard to this proposal, the applicant has complied with all front setbacks by meeting and in some cases exceeding the 30 foot requirement. Therefore, the proposed site plan complies with this infill regulation as well.

# B. Building Compatibility

Strawberry Hill is a neighborhood of smaller scale homes, curvilinear streets, and hilly terrain. existing homes to be torn down are small prefabricated metal homes on slab foundations averaging 1,000 sq.ft. in floor area size. Staff has worked with the applicant to achieve a series of design changes for the site and the buildings to improve the project and its place in the neighborhood. For example, the applicant was willing, at staff's direction, to reorient twelve of the thirteen garages towards the sides of the buildings instead of facing the street and interrupting the quality of the streetscape. Additionally, the applicant has also incorporated staff's proposal to join driveways, where possible, with shared access easements, whereby two adjacent houses will share one driveway. The result is the elimination of excess pavement and four existing curb cuts, creating a more pleasant and convenient pedestrian environment.



Figure 12: Building Footprints

Staff has added recommendations that will require the pitch of the roofs to be revised to be compatible with the style of homes (which reduce the amount of roof volume) and explore using hipped roofs to reduce the apparent roof mass of each unit. Staff has also added a recommendation that will require the unit for Lot 36 to be entirely brick because of its visibility from Duke Street. While the applicant has worked with staff on the type of roof and making sure the grade is not artificially raised, these homes will be larger and taller than the ones they will

replace. The proposed homes will be very different from the houses they replace and those that remain in the neighborhood. While the homes are within the floor area and height permitted within the R-8 zone, the proposed homes require yard modifications.



## C. Zoning Modifications

The applicant is requesting yard modifications for twelve of the thirteen lots (the applicant has not requested modifications to the yards on Lot 29). Section 11-416(A)(1) permits yard modifications where:

"...the Planning Commission determines that such modification is necessary or desirable to good site development, that specific and identifiable features of the site design make up for those impacts otherwise protected by the regulations for which modification is sought and that such modification will not be detrimental to neighboring property or to the public health safety and welfare."

The modifications to the side yards are justifiable in this case because the applicant incorporated staff's recommendations to make two design changes to the original plans to make the street more attractive and pedestrian oriented and to reduce the amount of paving in the project. First, the applicant has moved twelve of the thirteen front loaded garages to the sides of the houses. Second, the applicant has created joint driveways eight houses, resulting between elimination of four pedestrian interrupting curb cuts on the street. The result of these site design changes reduces the amount of width available on some of the lots. The applicant therefore requests reductions to the side yards which enable the shared driveways, side loaded garages, and retention of more of the mature trees on the site

In two cases, the proposed modifications are necessary next to lots outside of the project. A right side yard modification of 5.4 feet is proposed for Lot 16, which is necessary to provide the side loaded garage and shared driveway. A left side yard modification of 6.5 feet is proposed for Lot 12, which is also

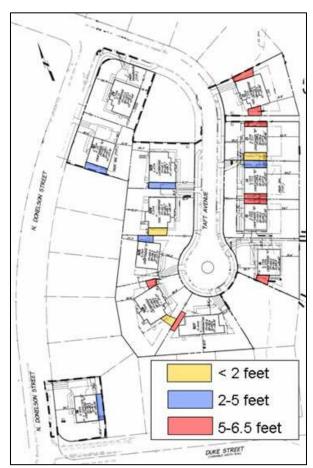


Figure 14: Requested Side Yard Modifications

necessary given the narrowness of the frontage and the City's desire to move the building as far out of the RPA as possible. A condition has been added to require additional landscaping on these sides to help reduce the impact on the adjacent neighbors. The remaining side yard modifications affect only the other houses in the development, and since new owners will have a chance to accept or reject them, staff does not believe that they significantly harm the neighborhood.

There are two proposed modifications that staff feels are not necessary and should not be approved, particularly since these modifications affect lots outside of the development. A side yard modification of 4 feet is requested for the east side of Lot 36. However, the proposed home can be shifted 4 feet towards North Donelson Street to meet the setback. A right side yard modification of 3.6 feet is requested for Lot 30, but since the left side yard exceeds the setback requirement by 19 feet, staff is recommending that the house be shifted to meet both side yards.

In general, the side yard modifications are justifiable due to the positive contributions, such as shared driveways and side loaded garages, that will occur as a result. Staff is recommending approval of the requested side yard modifications, except for Lot 36 and Lot 30.

### D. Subdivision

This case involves a resubdivision in an established neighborhood. As part of its interim approach to infill, Council amended the subdivision regulations to require a careful review of new lots with regard to neighborhood character and the new language includes a series of attributes to review in determining compatible character. Section 11-1710(B) states:

"No lot shall be resubdivided in such a manner as to detract from the value of adjacent property. Lots covered by a resubdivision shall be of substantially the same character as to suitability for residential use and structures, lot areas, orientation, street frontage, alignment to streets and restrictions as other land within the subdivision, particularly with respect to similarly situated lots within the adjoining portions of the original subdivision. In determining whether a proposed lot is of substantially the same character for purposes of complying with this provision, the Commission shall consider the established neighborhood created by the original subdivision, evidence of which may be shown by (1) subdivision plat documents, including amendments to the subdivision over time, as well as the development that has occurred within the subdivision; and (2) land in the same general location as the original subdivision with the same features so as to be essentially similar to the original subdivision area".

Under the amended subdivision language, the proposed new lots are required to be compared to those in the original and essentially similar subdivision area, to assess whether the character of the new lots is compatible with the character of the existing surrounding lots. In this case, the resubdivision creates only minor changes (5 to 25 foot shift in the lot lines), resulting in similarity in size, shape and orientation of the new lots when compared to the existing lots and when compared to lots in the immediate neighborhood.

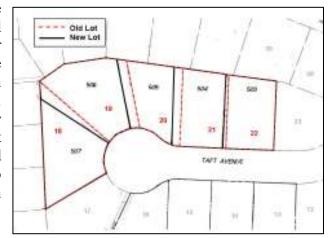


Figure 15: Subdivision Plan

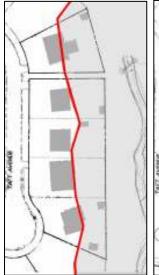
#### E. **Development in the Resource Protection Area (RPA)**

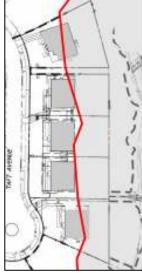
Behind the homes on the eastern side of Taft Avenue is the Strawberry Run Resource Protection Area (RPA), which is a wooded area that slopes down to Strawberry Run and is part of Fort Williams Park. Approximately half of the lot area for Lots 12 through 16 (those in this development to the east of Taft Avenue) are within the resource protection area. Calculations provided by the applicant show that approximately 2,066 sq.ft. of impervious area is currently within the RPA in the form of portions of the house and sheds along the rear property lines. The developer has worked with the City to reduce the overall RPA encroachment with the new development. In summary, the applicant has requested 1,454 sq.ft. of impervious surface encroachment into the Resource Protection Area, which is 612 sq.ft. less than what is currently encroaching the RPA. In addition, a stream restoration plan has also been proposed to improve the quality of the RPA environment.

Because a 30 foot front yard setback is a deed restriction in this neighborhood, if a full prohibition on future encroachment into to the RPA were required, those five lots would be essentially unbuildable. Therefore, the applicant has requested that some encroachment be permitted as shown in the proposed site plan.

#### Administrative **Approval** for **RPA** Encroachment

The applicant has requested an administrative approval for encroachment into the RPA under Section 13-107(E)(1), Article XIII, Environmental Management, which regulates development within the Resource Protection Area (RPA). This section of the Zoning Ordinance specifies:





Encroachment

Figure 17: Existing RPA Figure 16: Proposed RPA Encroachment

"The following encroachments, if permitted in the underlying zone, are allowed to the RPA buffer area if approved by the Director of T&ES and provided that a water quality impact assessment is performed and accepted by the Director of T&ES as complete in accordance with Sec. 13-114.

- (1) When the application of the buffer area would result in the loss of a buildable area on a lot or parcel recorded prior to October 1, 1989, encroachments into the buffer area may be approved by the Director of T&ES in accordance with the following criteria:
  - (a) Encroachments into the buffer area shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities;
  - (b) Where practicable, a vegetated area that will maximize water quality protection, mitigate the effects of the buffer encroachment, and is equal to the area of encroachment into the buffer area shall be established elsewhere on the lot; and,
  - (c) The encroachment may not extend into the seaward 50 feet of the buffer area."

In this case, the proposal generally complies with the R-8 zone and is consistent with the City's Master Plan. As required by the Zoning Ordinance, the applicant has provided a water quality

impact assessment for review by T&ES. Calculations of the proposed development show that 1,454 sq.ft. of impervious area will be constructed within the RPA, with a reduction in impervious area on each lot. The encroachment into the RPA will be at the edge of the RPA boundary and the sheds currently existing in the rear of the lots that are close to the stream will be removed, thus eliminating the most near-stream encroachments into the RPA. Finally, the proposal complies with stormwater management requirements, largely due to the provision of a stream restoration plan.



Figure 18: Existing Shed in RPA

During construction, erosion and sediment controls will be in place to protect Strawberry Run and the RPA from the impacts of development. Prompt stabilization of the proposed slope areas within the RPA will also be key to minimizing soil erosion. Stabilization practices employed on this slope area for erosion and sediment control purposes will be coordinated with the ultimate landscape/buffer revegetation plans for this area.

The applicant is also providing a buffer and stream restoration plan to satisfy the requirements of Article XIII, which is discussed in more detail in the following section of this report. The exotic species removal will work to establish a more natural, sustainable forested area. The restoration of the wooded character outlined in the revegetation plan will enhance habitat opportunities for wildlife and provide a more natural landscape than exists today. The stream stabilization and restoration will serve to improve stream hydrology, reduce bank erosion, nutrient loading and

downstream sediment transport. For these reasons, the Director of T&ES has granted the applicant's request for administrative approval of limited encroachment into the RPA.

### F. Stream Restoration

Strawberry Run is located to the east of the project site within Fort Williams Park. Single-family homes along Taft Avenue border the stream to the west and single-family homes along Fort Williams Parkway border the stream to the east. The stream runs perpendicular to Duke Street where is goes under the street through a culvert and is a tributary to Cameron Run. Over time, Strawberry Run has seriously deteriorated. Concrete debris can be found throughout the channel interrupting the stream flow. Erosion has undermined the stream banks and in a number of places along the channel the banks rise vertically,



Figure 19: Strawberry Run

resulting in faster water flow than is natural or desirable. Non-native vegetation has further impacted the health of the stream environment. The stream area is used by the public and continues to be an asset to the community despite its damaged state.

Section 13-109(E) of the Zoning Ordinance requires all development, redevelopment, and uses to meet storm water quality management performance requirements established in that section. ordinance provides for alternate stormwater management equivalency options, as set forth in Section 13-110, and improvements may include stream restoration, stream daylighting, removal of existing RPA encroachments, and RPA enhancement. The applicant of the proposed redevelopment chose to employ this option for alternative stormwater management and has proposed a stream restoration plan for Strawberry Run.



Figure 20: Non-native Vegetation (Bamboo)

Restoration of this stream is appropriate given that restoring the stream environment will provide significant benefits to the community with improved water quality and flood control and enhanced open space and parkland. The applicant's restoration plan includes 600 linear feet of Strawberry Run to be improved beginning near the culvert at Duke Street and moving upstream to a point corresponding to the middle of Lot 12 of the proposed redevelopment. The proposed restoration will combine in-stream structures with bank stabilization techniques and the concrete



Figure 21: Existing Bridge across Stream

debris within the stream channel will be removed. The non-native species will be managed and/or removed from the riparian corridor and native vegetation will be used to restore the banks and the corridor

### G. Streetscape

A series of improvements to the adjoining streetscape are being proposed as part of the

development. Currently, the existing sidewalk along Taft Avenue is four feet wide, is immediately adjacent to the street, and is non-existent along the eastern side of the street. The proposed development provides a five foot wide sidewalk and a six foot wide landscape strip between the sidewalk and the street in front of all the new homes and in front of Lot 17 (not part of this application but is bordered on each side by a new house). Street trees will be planted in the landscape strip further enhancing the streetscape. Finally, a landscaped island will be added to the center of the cul-de-sac to break up the appearance of asphalt and add another improvement to the street.



Figure 21: Existing Streetscape - Taft Avenue

Additionally, as previously discussed, the number of curb cuts onto Taft Avenue has been reduced as eight of the homes will share driveway access through a paired curb cut. Side loaded garages will be provided for all of the new structures except for lot 12 and two garage parking spaces will be provided with each new structure. (Lot 12 could not accommodate a side loaded garage as the frontage is only 53 feet and at least 20 feet is needed for the driveway along one side of the structure.) Additionally, the driveways will consist of concrete ribbon driveways to reduce the overall imperviousness of the site.

# H. Tree Retention and Open Space

As this neighborhood has been established for several decades, there are several large trees that merit preservation. Among these include the 22" Maple on Lot 12, the 24" Maple on Lot 29, the 18" Oak on Lot 504, the 18" Cedar on Lot 505, and the 12" Pine on Lot 507. The retention of these trees, which are all in the front yards of these lots, will help preserve the established character of this neighborhood and provide some stability in a changing environment. While staff has worked to retain many of the mature trees, there will be trees removed as part of the proposal. Although these trees could not be retained as part of the process, the



Figure 23: Pine Tree on Lot 507

applicant is proposing over 30 new street trees and over 60 trees, in addition to other landscaping, on the lots.

With regard to open space, the applicant has provided tabulations that show more than half of each lot as usable open space. On average, 60% of each lot will be open space and new landscaping will be provided. The entire project will provide 77,816 sq.ft. of open space. In addition, the applicant will make improvements to the 10 foot wide City owned property between Lots 12 and 13 that functions as a pedestrian path from Taft Avenue to Fort Williams Park. Improvements will include additional landscaping and a public sign to identify the path as a public connection.

### I. Community

In a meeting with the applicant and City staff with the Strawberry Hills Civic Association, the prevailing issue in the well-attended meeting concerned the timeline to begin construction. The existing homes have been vacant for a considerable amount of



Figure 22: City owned path to Fort Williams Park

time and the community seemed anxious to see something happen on these sites. The developer responded to questions about the size and compatibility of the new houses, and presented proposed elevations for the three different house types. Staff explained the R-8 zone requirements and how the proposed development would comply with the Zoning Ordinance with regard to height and floor area ratio. The improvements to Strawberry Run were also discussed at the meeting and the citizens were given the opportunity to review the preliminary plans for restoration. Overall, the Strawberry Hill community seemed satisfied with the proposal and expressed a desire for construction to begin quickly.

The applicant and City staff also met with the board members of the Seminary Hill Civic Association to discuss the proposal for the stream restoration. The board members had a number of questions for City staff and the applicant, including the whether the rip rap and sheds would be removed, how much encroachment will occur in the RPA, whether the park will remain in a natural state, and how citizens could be involved in the process. Overall, the board members were satisfied with the plan and emphasized their preference for a natural park rather than a park with structural amenities such as hardened paths, benches, and playgrounds.

# V. <u>CONCLUSION</u>

Staff recommends **approval** of the proposal with the staff recommendations.

STAFF: Richard Josephson, Acting Director, Planning and Zoning;

Jeffrey Farner, Chief, Development; Katye Parker, Urban Planner; and

Claudia Hamblin-Katnik, Watershed Program Administrator.

# VI. <u>STAFF RECOMMENDATION</u>

Staff recommends **approval** subject to compliance with all applicable codes and ordinances and the following conditions:

### A. BUILDING

1. The final building footprint and design shall be consistent with the preliminary site plan and architectural elevations dated December 2006 preliminary plan. The applicant shall also provide additional refinements to the satisfaction of the Director of P&Z that at a minimum shall include:

#### Setbacks

- a. The eastern side yard for Lot 36 shall be revised to comply with the required side yard setback (8 ft. min or ½ the building height, whichever is greater) by reducing the front yard setback from 34.1 feet to 30 feet.
- b. The southern side yard for Lot 30 shall be revised to comply with the required side yard setback (8 ft. min or ½ the building height, whichever is greater) by reducing the left side yard.
- c. The houses on Lots 13, 14, 15, and 16 shall be shifted to the west to the 30 foot front yard line in order to reduce the impervious area in the RPA to the rear.
- d. The house types for lots 503 and 504 shall be modified as shown in *Attachment* #1.
- e. Fences within the required front and side yards shall be limited to a maximum height of 3.5 feet and shall be a decorative open style metal fence or painted wooden picket. Fences within the required rear yards shall be limited to a maximum height of 6.0 feet and shall be a decorative open style metal fence or painted wooden picket. A detail of all fences shall be provided on the final site plan. Fences shall not be installed within the RPA. All fence locations shall be depicted on the final site plan.

### Scale - Compatibility

- f. The roofs shall be limited to a pitch of 7/12 for gable roofs and 5/12 for hipped roofs.
- g. Rear decks shall be permitted (except on Lots 12, 13, 14, 15, and 16) provided that they can comply with all of the following to the satisfaction of the Director of P&Z:
  - i. Must comply with all rear building setback requirements;
  - ii. Do not encroach into the tree protection easement; and
  - iii. Are no higher than two feet above grade.
- h. The building footprints and first floor elevation for each unit shall be limited to the footprints as depicted on the preliminary plan or as required by the site plan conditions to be revised to comply with the yard requirements. Any other change to the building footprint or first floor elevation shall constitute a major site plan amendment and subsequent review and approval by the Planning Commission.
- i. The facades that are visible from the streets and public park shall be designed with a level of architectural detail and with finishes consistent with the front

- facade treatment. In particular, this includes all sides of the structure on Lot 36, the northern façade of Lot 29, and the rear facades of Lots 12, 13, 14, 15, and 16.
- j. The house for Lot 36 shall be entirely brick for each façade.
- k. The primary materials of the units for each facade shall be limited to brick, stone, or cementitious siding.
- 1. The width of shutters shall equal half the width of the adjacent window.
- m. The chimneys shall be revised to appear as load-bearing masonry construction typical of the historic houses depicted.

#### General

- n. Color elevations for each lot will be submitted for review and comment with the final site plan.
- o. Architectural elevations (front, side, and rear) shall be submitted for review and comment with the final site plan. Each elevation shall indicate average finished grade. (P&Z)
- 2. The buildings shall incorporate the use of green building and sustainable techniques for the site and building systems. Provide specific examples as to how this development will incorporate this technology, including low impact development (LID) measures, green roof technology, and energy efficient materials into the design. The applicant shall also work with the City for reuse of the existing building materials as part of the demolition process, leftover, unused, and/or discarded building materials. (P&Z)(T&ES)
- 3. The garages shall contain a minimum unobstructed dimension of 18 ft. x 18.5 ft. for the two standard size parking spaces. (P&Z)
- 4. If fireplaces are utilized in the development, the applicant is required to install gas fireplaces to reduce air pollution and odors. Animal screens must be installed on chimneys. (T&ES)
- 5. The house numbers should be placed on the front and back of each home at least 3 inches high. (Police).

#### B. LANDSCAPING - STREETSCAPE

- 6. A revised landscape plan shall be provided with the final site plan to the satisfaction of the Directors of P&Z and RC&PA. At a minimum the plan shall provide the level and quality of landscaping depicted on the preliminary landscape plan and the plan shall also provide:
  - a. Along Taft Avenue, N. Donelson Street, and the service road, ornamental street trees shall be provided 15-20 feet on center. The street trees shall be 2.5-3 inch caliper at the time of installation. Due to conflicts with an existing light pole and the storm sewer at Lot 506, a tree shall be planted in the front yard of the lot rather than along the street.
  - b. Additional landscaping shall be installed in the northern side yard of Lot 12 and the southern side yard of Lot 16 to provide screening/buffering for the adjoining homes.

- c. The applicant shall improve the pedestrian connection between Lot 12 and Lot 13 to the satisfaction of the Directors of P&Z and RP&CA, which shall consist of the following:
  - i. A decorative sign indicating the path as a public pedestrian connection.
  - ii. Materials such as stepping stones and landscaping to reinforce the public nature of the connection. The path shall not be paved.
- d. The traffic island shall contain low level landscaping (no trees) such as Juniperus horizontalis. The island curbing shall be designed as mountable and shall include a 3-4 foot brick border around the perimeter.
- e. Provide a detail of the plantings around the transformer to ensure proper clearance and sufficient screening.
- f. The pervious material in between the concrete ribbon driveways shall be grasscrete or a similar material, to be addressed at final site plan.

### General

- g. All landscaping shall be maintained in good condition and replaced as needed.
- h. No fences shall be installed within the drip line of any tree shown to be saved on the preliminary site plan unless the Directors of P&Z and RP&CA determine that the proposed installation will not adversely affect the tree
- i. Plantings shall include a mixture of seasonally variable, evergreen and deciduous shrubs, ornamental and shade trees, groundcovers and perennials that are horticulturally acclimatized to the Mid-Atlantic and Washington, DC National Capital Region.
- j. Above and below grade site utilities, site furnishings, fences, architecture, lights, signs and site grading must be coordinated to avoid conflicts. Ensure positive drainage in all planted areas.
- k. Limits of grassing operations and limits of work shall be shown on the plans.
- 1. Provide planting details including sections, for all site landscape conditions. Provide City of Alexandria Street Tree Planting Detail as provided in the City of Alexandria Landscape Guidelines.
- m. Provide the following notes on the drawings:
  - i. "Specifications for plantings shall be in accordance with the current and most up to date edition of ANSI-Z60.1, The American Standard for Nursery Stock as produced by the American Association of Nurserymen; Washington, DC."
  - ii. "In lieu of more strenuous specifications, all landscape related work shall be installed and maintained in accordance with the current and most up-to-date edition (at time of construction) of Landscape Specification Guidelines as produced by the Landscape Contractors Association of Maryland, District of Columbia and Virginia; Gaithersburg, Maryland."
  - iii. "Prior to commencement of landscape installation/planting operations, a pre-installation/construction meeting will be scheduled and held with the City's Arborist and Landscape Architects to review plant installation procedures and processes."
- n. Trees are not to be planted under or near light poles.
- o. All trees outside of the RPA are to be limbed up a minimum of 6 feet as they mature to allow for natural surveillance. The proposed shrubbery outside of the

RPA shall not be higher than three (3) feet when planted within six (6) feet of walkways. (P&Z) (RP&CA) (Code) (Police)

- 7. Provide evidence of coordination for location of site utilities with other site conditions, including:
  - a. Provide location and direction of service openings and required clearances for above grade utilities such as transformers, telephone, and cable boxes.
  - b. Minimize conflicts with plantings, pedestrian areas, and major view sheds.
  - c. Do not locate above grade utilities in designated open space areas. (RP&CA)

### C. TREE RETENTION

- 8. A tree protection easement shall be granted at the rears of Lots 12, 13, 14, 15, and 16 for the trees outside the limits of disturbance as depicted on the preliminary site plan submitted December 2006. The tree protection covenant shall prohibit all construction including, but not limited to, buildings and structures. The plat and language for the tree protection covenant shall be approved by the City prior to release of a building permit. The final approved language shall be recorded within the land records. Maintenance of the tree protection covenant shall be the responsibility of the owners of the lots. The Homeowners Association shall have the authority and ability to enforce the terms of the tree protection covenant. (P&Z)
- 9. The applicant shall implement the following tree protection measures to ensure the retention of the proposed trees to be saved as depicted on the preliminary site plan submitted December 2006 to the satisfaction of the Directors of P&Z and RC&PA. All proposed tree protection details shall be depicted on the final site plan and be provided throughout the construction process.
  - a. The limits of disturbance shall be revised to include the following:
    - i. Lot 13 increase the tree protection for the 22" oak on the northern portion of the lot.
    - ii. Lot 14 increase the tree protection for the 30" locust tree on the eastern portion of the lot.
    - iii. Lot 507 increase the tree protection for the 10" locust tree on the eastern portion of the lot.
    - iv. Lot 506 increase the tree protection for the 15" and 22" locust trees on the southern portion of the lot.
    - v. Lot 503 increase the tree protection for the 15" oak tree on the northern portion of the lot.
    - vi. Lots 503-506 reduce the limits of disturbance to be located outside the drip line for the large trees on the adjoining properties which range in size from 12" to 36" caliper.
  - b. Construction materials or equipment shall not be stored or staged outside the limits of disturbance or within a tree protection area.
  - c. A note identifying these restrictions shall be provided on the Site Plan Cover, Erosion Sediment Control, and Landscape Plan sheets.

- d. Provide a note on the plan that the existing sheds on Lots 12, 13, 14, and 16 will be removed without heavy equipment entering into the drip line of the existing tree
- e. Tree protection for any protected tree shall be in compliance with the Landscape Guidelines. The developer shall call the City Arborist for a review of the installed tree protection following its installation and prior to any construction, clearing, grading, or site activity.
- f. All underground utilities shall be located so as to avoid disturbance for grading beyond the limits of disturbance.
- g. If the trees are damaged or destroyed by construction activities the applicant shall replace the tree(s) with the largest caliper trees(s) of comparable species that are available or can be transplanted to the satisfaction of the City Arborist and Director of P&Z; the remaining tree caliper shall be planted on-site or adjacent to the site. In addition, a fine will be paid by the applicant in an amount not to exceed \$10,000 for each tree that is destroyed if the approved tree protection methods have not been followed. The replacement trees shall be installed and if applicable the fine shall be paid prior to the release of the public improvement bonds.
- h. "Trenchless" construction, or a similar approach to the satisfaction of the Director of P&Z, shall be used for roof drains wherever located within the tree canopy.
- i. The applicant shall submit a plan prepared by a certified arborist which shall indicate all necessary enhancements to enable retention of the on-site and off-site trees such as watering/fertilizer, etc., that are required by the tree preservation plan prior to construction/grading of the site. The plan shall be approved prior to release of the site plan or grading and/or demolition for the site. (P&Z) (RP&CA)
- 10. The area of limits of disturbance and clearing for the site shall be limited to the areas of disturbance and clearing as generally depicted on the preliminary site plan submitted December 2006 and as amended by Condition 9. (P&Z)

### D. STREAM RESTORATION

- 11. A stream restoration plan shall be prepared and provided to the City by the applicant per requirements of the Chesapeake Bay Protection Act. Included in the restoration plan shall be at a minimum:
  - a. Identification of all trees to be removed:
  - b. Detail of planting to be installed; and
  - c. As-built drawings of plantings. (RP&CA)
- 12. The applicant shall hold a community meeting(s) to present the stream restoration plan and details of construction and implementation to affected communities prior to the release of the final site plan or disturbance in the RPA, whichever occurs first. (P&Z) (RP&CA) (T&ES)
- 13. The existing bridge which crosses Strawberry Run shall be retained as part of the stream restoration process. A structural engineer shall certify the structural integrity of the

bridge, bridge embankment, and associated structural elements to the satisfaction of the Director of T&ES prior to the release of the Final Site Plan. Any revisions necessary to reinforce the structural integrity of the bridge shall be done in a manner in keeping with the natural character of the stream to the satisfaction of the Directors of P&Z, RP&CA, and T&ES. All notes regarding the removal of the bridge shall be removed. (P&Z) (RP&CA) (T&ES)

- 14. VDOT Class III rock is specified as the stone for constructing rock vanes and cross vanes. The use of imbricated boulders shall be used, as they will give more structural stability and will be more aesthetically pleasing. (T&ES)
- 15. The archaeological investigation of the stream area must be completed and approved by Alexandria Archaeology prior to any ground disturbance in the stream area. (Archaeology)

#### E. AFFORDABLE HOUSING

16. The developer has offered to make a voluntary contribution of "\$2 per gross square foot on the 41,230 gross square feet of permitted ("by right") development and \$4 on the additional 4,729.35 gross square feet made possible by the SUP, for a total voluntary contribution of \$101,377, consistent with the conclusions of the "Developer Housing Contribution Work Group Report" dated May 2005 and accepted by the Alexandria City Council on June 14, 2005. This contribution shall be made prior to the issuance of the first certificate of occupancy. (Office of Housing)

### F. SITE PLAN

- 17. All retaining walls shall be constructed with a natural stone or brick veneer. Any protective fencing or railing atop retaining walls shall be visually unobtrusive and of a decorative metal material, to the satisfaction of the Directors of P&Z and Code Enforcement. Provide a retaining wall detail on the final site plan. (P&Z)
- 18. The proposed transformers shall not be located within the required front yards for any of the proposed homes. All utility structures (except fire hydrants) shall be clustered and located so as not to be visible from a public right-of-way or private street and outside of the front setback. All structures shall be located and screened to the satisfaction of the Director of P&Z. (P&Z)
- 19. Freestanding subdivision and/or development signage shall be prohibited. (P&Z)
- 20. Provide a lighting plan with the first final site plan to verify that lighting meets City standards. The plan shall be to the satisfaction of the Director of T&ES, in consultation with the Chief of Police, and shall include the following:
  - a. Clearly show location of all existing street lights and site lights, shading back less relevant information;

- b. A lighting schedule that identifies each type and number of fixtures, mounting height, and strength of fixture in Lumens or Watts;
- c. Manufacturer's specifications and details for all proposed fixtures;
- d. A photometric plan with lighting calculations that include all existing and proposed light fixtures, including any existing street lights located on the opposite side(s) of all adjacent streets. Photometric calculations must extend from proposed building face(s) to property line and from property line to the opposite side(s) of all adjacent streets and/or 20 feet beyond the property line on all adjacent properties; and
- e. Lighting fixtures shall be setback two feet from back of curb. Provide detailed information indicating proposed light pole and foundation in relationship to adjacent grade or pavement. Street light foundations shall be concealed from view. (P&Z) (T&ES) (RP&CA)
- 21. The landscaped circle within the Taft Avenue cul-de-sac shall be designated as No Parking. The applicant shall be responsible for placing the applicable signage. The location and a detail of the signage shall be depicted on the final site plan. (Code)
- 22. The project lies entirely within an area described on historical maps as containing marine clays. Construction methodology and erosion and sediment control measures must account for the presence of marine clay or highly erodible soils. Provide a geotechnical report, including recommendations from a geotechnical professional for proposed cut slopes and embankments. (T&ES)
- 23. Provide all pedestrian and traffic signage in accordance with the *Manual of Uniform Traffic Control Devices* (MUTCD), latest edition to the satisfaction of the Director of T&ES. (T&ES)
- 24. All driveway entrances, sidewalks, curbing, etc. in public ROW or abutting public ROW shall meet City design standards. (T&ES)
- 25. Replace existing curb and gutter, sidewalks, and handicap ramps that are in disrepair or broken. (T&ES)
- 26. The minimum diameter for public storm sewers is 18 inches. The minimum diameter for public sanitary sewer is 10 inches. All private utilities are to be located outside of public ROW and public utility easements. Show all existing and proposed easements, both public and private. (T&ES)
- 27. Solid waste services shall be provided by the City. In order for the City to provide solid waste service, the following conditions must be met. The development must meet all the minimum street standards, including all standard cul-de-sac turnarounds, if applicable. The developer must provide adequate space within each unit to accommodate a City Standard super can and recycling container. The containers must be placed inside the units or within an enclosure that completely screens them from view. The developer

- shall purchase the standard containers from the City or provide containers that are compatible with City collection system and approved by the Director of T&ES. (T&ES)
- 28. The applicant is advised that the sanitary sewer permit shall be submitted to the City prior to final site plan approval. A sewer tap fee with an amount to be determined based on the current fee schedule at the time of plan approval shall be paid per the number of residential units prior to final site plan approval. (T&ES)
- 29. A security survey is to be completed for any sales or construction trailers that are placed on the site. This is to be completed as soon as the trailers are placed on site by calling the Community Relations Unit at 703-838-4520. (Police)
- 30. All archaeological work will be carried out in accordance with the *City of Alexandria* Archaeological Standards *and is subject to the approval of the City Archaeologist*. (Archaeology)
- 31. The applicant shall not allow metal detection to be conducted on the property, unless authorized by Alexandria Archaeology. (Archaeology)
- 32. Hydraulic calculations (computer modeling) shall be completed to verify main sizes upon final submittal of the site plan. Profiles will be required for hydraulic calculations. Depict and label sizes of all existing water mains that front any lots under construction. (VAWC)

### G. CONSTRUCTION

- 33. The applicant shall submit a wall check to the Department of P&Z prior to the commencement of framing for each of the buildings. The building footprint depicted on the wall check shall comply with the approved final site plan. The wall check shall also provide the top-of-slab and first floor elevation as part of the wall check. The wall check shall be prepared and sealed by a registered engineer or surveyor. (P&Z)
- 34. As part of the request for a certificate of occupancy permit, the applicant shall submit a building and site location survey to the Department of P&Z for all site improvements. The applicant shall also submit a certification of height for the building as part of the certificate of occupancy for each building(s). The certification shall be prepared and sealed by a registered architect and shall state that the height of the building complies with the height permitted pursuant to the approved development site plan and that the height was calculated based on all applicable provisions of the Zoning Ordinance. (P&Z)
- 35. A temporary informational sign shall be installed on the site prior to the approval of the final site plan for the project and shall be displayed until construction is complete incorporating the required information; the sign shall notify the public of the nature of the upcoming project and shall provide a contact person and phone number for public questions regarding the project. A detail of the sign shall be provided with the final site plan. (P&Z)

- 36. The applicant shall identify a person who will serve as liaison to the community throughout the duration of construction. The name and telephone number, including an emergency contact number, of this individual shall be provided in writing to residents, property managers and business owners whose property abuts the site and shall be placed on the project sign, to the satisfaction of the Directors of P&Z and T&ES. (P&Z)
- 37. The applicant shall provide off-street parking for all construction workers without charge. For the construction workers who use DASH, or another form of mass transit to the site, the applicant shall subsidize a minimum of 50% of the fees for mass transit. Compliance with this condition shall be based on a plan, which shall be included in the final site plan for approval by the Directors of P&Z and T&ES. This plan shall set forth the location of the parking to be provided at various stages of construction, how many spaces will be provided, how many construction workers will be assigned to the work site, and mechanisms which will be used to encourage the use of mass transit. The plan shall also provide for the location on the construction site at which information will be posted regarding Metro schedules and routes, and bus schedules and routes. If the plan is found to be violated during the course of construction, a correction notice will be issued to the developer. If the violation is not corrected within ten (10) days, a "stop work order" will be issued, with construction halted until the violation has been corrected. (P&Z)(T&ES)
- 38. The applicant shall prepare and submit a plan that delineates a detailed construction management plan for the entire project for review and approval by the Directors of T&ES and Code Enforcement prior to the release the final site plan. Before commencing any clearing or grading of the site, the applicant shall hold a meeting with notice to all adjoining property owners to review the location of construction worker parking, plan for temporary pedestrian and vehicular circulation, and hours and overall schedule for construction. Contractors shall not cause or permit vehicles to idle for more than 10 minutes when parked. (T&ES)
- 39. A "Certified Land Disturber" (CLD) shall be named in a letter to the Division Chief of C&I prior to any land disturbing activities. If the CLD changes during the project, that change must be noted in a letter to the Division Chief. A note to this effect shall be placed on the Phase I Erosion and Sediment Control sheet on the site plan. (T&ES)
- 40. During the construction phase of this development, the site developer, their contractor, certified land disturber, or owner's other agent shall implement a waste and refuse control program. This program shall control wastes such as discarded building materials, concrete truck washout, chemicals, litter or trash, trash generated by construction workers or mobile food vendor businesses serving them, and all sanitary waste at the construction site and prevent offsite migration that may cause adverse impacts to neighboring properties or to the environment to the satisfaction of Directors of T&ES and Code Enforcement. All wastes shall be properly disposed offsite in accordance with all applicable federal, state and local laws. (T&ES)

- 41. Should any unanticipated contamination, underground storage tanks, drums or containers be encountered at the site, the applicant must immediately notify the City of Alexandria Department of Transportation and Environmental Services, Division of Environmental Quality. (T&ES)
- 42. Prior to the release of the final site plan, provide a Traffic Control Plan for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging. (T&ES)
- 43. All Traffic Control Device design plans, Work Zone Traffic Control plans, and Traffic Studies shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. (T&ES)

### H. SUBDIVISION/LEGAL/PROCEDURAL

- 44. A perpetual private access easement shall be recorded by the applicant for all shared driveways. Locations of all easements such as the sewer easement, water easement, ingress/egress easement and all other easements and reservations shall be depicted on the final subdivision plan. The easement and plat shall be recorded prior to release of the final site plan. (P&Z)
- 45. The approval of the subdivision shall be contingent upon the approval of DSP# 2004-0038. The final subdivision plat shall be amended to reflect all applicable provisions and conditions of approval for DSP#2004-0038. The final subdivision plan shall comply with Section 11-1709 of the Zoning Ordinance. (P&Z)
- 46. Show all existing and proposed easements, both public and private. (T&ES)
- 47. The applicant shall submit a homeowner's agreement (HOA) for approval by the City, prior to applying for the first certificate of occupancy permit. Such HOA shall include the conditions listed below, which shall be clearly expressed in a separate section of the HOA documents. Also, such section within the HOA shall include language which makes clear that the site plan conditions listed shall not be amended without the approval of the Planning Commission.
  - a. The protected trees/tree protection areas as set forth as part of the site plan approval.
  - b. Exterior building improvements by future residents, including above ground decks not included on the approved plans or different from the approved plans, shall require the approval of the Director of P&Z and must be consistent with the site plan conditions.
  - c. Building additions are limited to the building footprint depicted on the approved site plan. Decks are subject to the approved development site plan.
  - d. All required landscaping and screening, including trees and landscaping in the landscaped circle at the end of Taft Avenue, shall be maintained in good condition.

- e. The driveways shall consist of three foot wide concrete ribbons with a pervious material, such as grasscrete, in the center. Areas designated as pervious must continue to be pervious unless the Director of T&ES approves an impervious material for handicap accessibility or other reasons.
- f. No ground disturbing activity shall occur within the "limits of disturbance" areas or drip-line areas of trees preserved as a condition of this site plan approval.
- g. The principal use of the individual garages shall be for passenger vehicle storage only.
- h. Pesticides, fungicides, and fertilizers are prohibited within the RPA. (P&Z) (T&ES)

### I. STORMWATER

- 48. Developer to comply with the peak flow requirements of Article XIII of the Alexandria Zoning Ordinance. (T&ES)
- 49. The City of Alexandria's storm water management regulations regarding water quality are two-fold: first, phosphorus removal requirement and second, water quality volume default. The best management practice in the form of stream restoration will serve as fulfillment of these requirements. (T&ES)
- 50. The applicant is advised that all stormwater designs that require analysis of pressure hydraulic systems and/or inclusion and design of flow control structures must be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. If applicable, the Director of T&ES may require resubmission of all plans that do not meet this standard. (T&ES)
- 51. The storm water Best Management Practices (BMPs) (stream restoration) required for this project shall be constructed and installed under the direct supervision of the design professional or his designated representative. Prior to release of the performance bond, the design professional shall submit a written certification to the Director of T&ES that the BMPs are constructed and installed as designed and in accordance with the approved Final Site Plan. (T&ES)
- 52. Surface-installed storm water Best Management Practice (BMP) measures, i.e. Bio-Retention Filters, Vegetated Swales, etc. that are employed for this site, require installation of descriptive signage to the satisfaction of the Director of T&ES. Details of the signage shall be provided on the final site plan. (T&ES)
- 53. Prior to release of the performance bond, the applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that any existing storm water management facilities adjacent to the project and associated conveyance systems were not adversely affected by construction operations and that they are functioning as designed and are unaffected by construction activities. If maintenance of the facility or systems were required in order to make this certification, provide a description of the maintenance measures performed. Provide proposed elevations

- (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)
- 54. Plan must demonstrate to the satisfaction of the Director of T&ES that adequate stormwater outfall is available to the site or the developer is to design and build on-site or off-site improvements to discharge to an adequate outfall. (T&ES)
- 55. Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)
- 56. If combined uncontrolled and controlled stormwater outfall is proposed, the peak flow requirements of Article XIII of AZO shall be met. (T&ES)
- 57. Plan must demonstrate compliance with flood plain ordinance. No final plan shall be released until full compliance with flood plain ordinance has been demonstrated. (T&ES)
- 58. Plan must demonstrate to the satisfaction of the Director of T&ES that a non-erosive stormwater outfall is present. (T&ES)

#### CITY DEPARTMENT COMMENTS

Legend: C - code requirement R - recommendation S - suggestion F - finding

### **Code Enforcement**

The following are repeat comments. Updated comments in **BOLD**.

- C-1 All exterior walls within 5 feet from an interior property line shall have a fire resistance rating of 1 hour, from both sides, with no openings permitted within the wall. As alternative, a 2 hour fire wall may be provided. This condition is also applicable to skylights within setback distance. Condition met, shown as Note 17 on Sheet 2.
- C-2 Prior to the issuance of a demolition permit or land disturbance permit, a rodent abatement plan shall be submitted to Code Enforcement that will outline the steps that will taken to prevent the spread of rodents from the construction site to the surrounding community and sewers. Condition met, shown as Note 16 on Sheet 2.
- C-3 Roof drainage systems must be installed so as neither to impact upon, nor cause erosion/damage to adjacent property. Condition met, Shown as Note 18 on Sheet 2.
- C-4 A soils report must be submitted with the building permit application. Acknowledged.
- C-5 New construction must comply with the current edition of the Uniform Statewide Building Code (USBC). Condition met, Shown as Note 15 on Sheet 2.
- C-6 Construction permits are required for this project. Plans shall accompany the permit application that fully detail the construction as well as layouts and schematics of the mechanical, electrical, and plumbing systems. Acknowledged.
- C-7 Permission from adjacent property owners is required if access to the adjacent properties is required to complete the proposed construction. Otherwise, a plan shall be submitted to demonstrate the construction techniques utilized to keep construction solely on the referenced property. Acknowledged.
- C-8 A wall location plat prepared by a land surveyor is required to be submitted to this office prior to requesting any framing inspection. Acknowledged.
- C-9 The applicant must obtain a Certificate of Occupancy prior to occupancy (use) of the structure (USBC 119.1). Condition met, shown as Note 12 on Sheet 2.
- C-10 Provide turning movement diagrams per City Fire Apparatus Specification for Trucks 204 and 208 to demonstrate adequate turning movements in cul-de-sac. Acknowledged but not provided. Exhibit only provided for Truck 204. Provide exhibit for Truck 208. Also include specifications for both apparatus that exhibits were programed for. Applicant's response: The turning movement for Truck 204 has been shown on

Sheet 3. The turning movement for Truck 208 has not been shown, because the truck cannot currently turn around in the existing cul-de-sac without driving over the curb. Please note that the provision of the traffic circle does not preclude this movement as this is an existing condition that cannot be met. Applicant shall provide a turning movement diagram per City Fire Apparatus Specifications for Truck 208 showing the lack of adequate turning movement in the cul-de-sac.

### **Transportation and Environmental Services**

- C-1 A performance bond to guarantee installation of the required public improvements must be posted prior to release of a development plan.
- C-2 All downspouts must be connected to a storm sewer by continuous underground pipe.
- C-3 The sanitary sewer tap fee must be paid prior to release of the plan.
- C-4 All easements and/or dedications must be recorded prior to release of the plan.
- C-5 Plans and profiles of utilities and roads in public easements and/or public right-of-way must be approved prior to release of the plan.
- C-6 All drainage facilities must be designed to the satisfaction of T&ES. Drainage divide maps and computations must be provided for approval.
- C-7 All utilities serving this site to be placed underground.
- C-8 Provide site lighting plan to meet minimum city standards.
- C-9 Plan shall comply with the Chesapeake Bay Preservation Act in accordance with Article XIII of the City's zoning ordinance for storm water quality control.
- C-10 Provide a phased erosion and sediment control plan consistent with grading and construction per City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4.
- C-11 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line.
- C-12 All drainage facilities must be designed to the satisfaction of T&ES. Drainage divide maps and computations must be provided for approval.
- C-13 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line.

- C-14 The applicant must comply with the Article XIII of the City of Alexandria Zoning Ordinance, which includes requirements for storm water pollutant load reduction, treatment of the water quality volume default, and storm water quantity management.
- C-15 The applicant must comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. This includes naming a Responsible Land Disturber on the Erosion and Sediment Control sheets prior to engaging in land disturbing activities in accordance with Virginia Erosion and Sediment Control Law.
- C-16 All required permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, Virginia Marine Resources must be in place for all project construction and mitigation work prior to release of the final site plan. This includes the state requirement for a VSMP permit for land disturbing activities greater than 2500 SF.
- F-1 Label the proposed sanitary sewer laterals on the site plan.
- F-2 Remove the circular areas depicted on the plan to be disturbed on the following lots: 504, 505, 29, and in between lot 506 and 507. These areas are likely to be disturbed during construction.
- F-3 The storm inlet design computations should be corrected to use City Standard inlets (CSDI-1) and utilize the appropriate rainfall intensity and design criteria in the City of Alexandria.
- F-4 Provide the City of Alexandria's standard approval block with the DSP number filled on all plan sheet associated with the project.
- F-5 The time of concentration still appears too long, and the flow path appears incorrect. Review of storm sewer maps, available for review at City Hall Room 4130, show that there is very little occurrence of shallow concentrated flow. Most of the flow path is through incised streams and pipes. The flow path on Sheet 4 misses an incised channel though the Episcopal Theological Seminary property. As a result, the flood discharges may be substantially underestimated. Revise these calculations accordingly.
- F-6 Structural stability of the existing bridge has not been adequately addressed. Merely stating that the banks will be stabilized does not address its current condition. Again, the stability of the existing bridge should be assessed by a qualified structural and/or geotechnical engineer. This engineer should determine whether stabilizing the banks is adequate to maintain bridge safety, or if other structural means are needed. Should the bridge be re-engineered or removed altogether, the applicant needs to work with staff to develop a suitable alternative to the satisfaction of the Directors of Transportation and Environmental Services, Recreation, Park and Cultural Activities, and Planning and Zoning.

- F-7 The rock vane at approximate station 5+40 appears detrimental to the stability of the bridge. As shown, it will direct flow to the south embankment. Adjust this design by adding a cross-vane in this location.
- F-8 The storm sewer computations and profiles, stormwater management computations, utility profiles and lighting computations have only received a cursory review. This information will receive a complete review during final site plan submission.
- F-9 Ensure that the location of the existing overhead utility in the cul-de-sac is not in conflict with Fire Truck access.
- DEQ comments regarding Williamsburg Environmental Group Stream Restoration plan submitted to the City of Alexandria on June 22, 2006.
- F-10 Within the representative cross-sections, show 2 and 10-year water surface elevations in addition to the 1 year water surface elevations provided. Final plan shall have an E&S plan for the construction phase. As part of the Phase I E&S, the applicant shall show how the stream flow will be temporarily diverted during the construction phase.
- F-11 On both Erosion and Sediment Control Phase I and Phase II sheets the contours are difficult to follow and poorly marked. Applicant shall clarify the contours such that proper drainage can be ascertained.
- F-12 The orientation of the construction entrance on Lot 13 is unacceptable. It does not look like it is physically possible to make the turn as shown (Sheet 8).
- F-13 The silt fence along the service road on Lot 36 shall follow the limits of clearing.
- F-14 Silt traps (settling basins) shall be added wherever wash racks are located.
- F-15 Phase II E&S shows the super silt fence moved within the RPA to closer to the proposed houses. However, no stabilization of the cleared area within the RPA is shown. Plan shall provide some method of permanent stabilization within the limits of this clearing and grading.
- F-16 Sheet 15A of 20, Lot Planting Schedule: This plan shows non-native plants in the RPA. While those chosen have very attractive features (vibrant fruits and attractive flowers) it is the policy of the City to plant only native plants in the RPAs. Therefore native plants shall be substituted for the non-native plants in the landscape plan at least for those plants to be planted within the RPA. Plants within the RPA should be riparian in nature.
- F-17 There are several references to the removal of non-native vegetation. Frequently the verbiage used is "...non-native vegetation (i.e. bamboo)...". The use of i.e. implies that it is bamboo specifically and only bamboo that is the non-native vegetation to be removed. Applicant shall remove ALL non-native vegetation and shall provide a plan for all removal.

- F-18 The stream restoration plan shall inventory all trees and show them appropriately on the plan. This will give staff and applicant a better idea of the landscape needs and the implications of tree removal.
- F-19 Applicant shall provide information in greater detail regarding the cross-sectional transition between the bridge (where the banks are not laid back) and the riprap section (where the banks are laid back).
- F-20 Staging and stockpile areas for the stream restoration shall be denoted on the plan.
- F-21 Sheet 8, the "unnamed tributary" is Strawberry Run.
- F-22 Sheet 9, Stream Erosion and Sediment Control: Narrative needs to clearly outline route of vehicular movement along and within the floodplain and stream area, a timeline and description of what activities will occur and when, a more thorough explanation of the stabilization techniques to be employed. The plan shows B/M, SR, and TO in one area only (near the outlet pipe) but the dappled detail is shown along most of the stream. The plan shall clearly show if these methods will be used where the dappled area extends or to this area only.
- F-23 Construction entrance at proposed ingress and egress point, or near the street onto which the vehicles will flow shall be provided.
- F-24 Sheet 10, Erosion and Sediment Control Notes and Details:
  - a. References to Fluvanna County shall be removed.
  - b. Stockpile areas shall be detailed on the plan and preferably outside the RPA.
  - c. References to riprap shall be changed to imbricated stone.
- F-25 Sheet 11, Planting Notes and Details
  - a. All plants shall be native to Virginia, preferable from the coastal plain.
  - b. Under "Proposed Native Species Management" the i.e. shall be changed to e.g..
- F-26 Sheet 12, City of Alexandria Notes and Details
  - a. General Notes #7 states, "The subject property does not have any existing or proposed 2:1 slopes. Verify for accuracy and correct if necessary.
  - b. General Notes #18 states, "Roof drainage systems will be installed so as not to impact upon or cause erosion/damage to adjacent properties." Verify for accuracy and correct if necessary.
  - c. General Notes #30 watershed is Strawberry Run.
  - d. Construction Notes #9 refers to septic fields. Should septic fields be located on this site they shall be delineated. If none exist this note shall be removed.
  - e. Construction Notes #21 refers to relocation of existing landscaping. No other references to relocation of existing landscaping appear on the plan. Should this be actually a consideration it shall be discussed on Sheet 11, Planting Notes and Details. If this is not being considered this note shall be removed from the plan.

- f. Construction Notes #24 states there are no RPAs on this property. This is incorrect and shall be corrected.
- g. Construction Notes #25 refers to retaining walls. If retaining walls are proposed they shall be noted and detailed on the plan. Correct as necessary.
- F-27 Roof drains on lots 500, 501, 502 and 12 shall sheet flow toward and through the RPA buffer. Lots shall be graded and landscaping designed to direct drainage such that it does not impact neighboring lots nor create erosive areas through the buffer.
- F-28 To dissipate some of the stream's energy, upstream from the bridge, the applicant shall add a rock cross vane with an enhanced pool somewhere around station 6+00.

### Virginia American Water Company

- F-1 The existing water main on Taft Avenue south of the existing fire hydrant is 4".
- F-2 On sheet 14 of 20, between structures 3 and 4, the existing water main is currently labeled as eight-inch. This water main is actually four-inch.
- F-3 There is an existing 2" water main in the service road that parallels Duke Street. There is an 8" water main in Duke Street.
- F-4 Please show and call out sizes of all existing water mains that front any lots under construction. Existing water main is currently not shown in front of lots 12, 29, and 30. A copy of the as-built was faxed to Land Design Consultants on 12-18-06 for their use.
- F-5 VAWC reserves the right to determine the final placement of the water meters.

### **Historic Alexandria**

- F-1 A Civil War period map depicts a structure on this property. In addition, it is possible that Union soldiers camped in this area between Fort Worth and Fort Williams. The construction of houses (part of a tract development) during the 1950s would probably have disturbed or destroyed much of the evidence of past activities. However, it is possible that there are still remnants of archaeological resources on the property that could provide insight into military activities during the war and into residential life on the outskirts of town in the 19<sup>th</sup> century. This is particularly true for lots adjacent to the small stream to the east of the property. In addition, the area near the stream has the potential to yield evidence of Native American activities.
- F-2 Archaeological testing was conducted on a portion this property, but Alexandria Archaeology has not yet received the final report. Testing is still required in the stream area.
- C-1 To insure that significant information is not lost as a result of the current development project, the applicant must hire an archaeological consultant to complete an

Archaeological Evaluation. Contact Alexandria Archaeology to obtain a scope of work for this investigation. If significant resources are discovered, the consultant must complete a Resource Management Plan, as outlined in the *City of Alexandria Archaeological Standards*. Preservation measures presented in the Resource Management Plan, as approved by the City Archaeologist, will be implemented.

- C-2 All archaeological preservation measures must be completed prior to ground-disturbing activities (such as coring, grading, filling, vegetation removal, undergrounding utilities, pile driving, landscaping and other excavations as defined in Section 2-151 of the Zoning Ordinance). To confirm, call Alexandria Archaeology at (703) 838-4399.
- C-3 Call Alexandria Archaeology immediately (703-838-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds.
- C-4 The statements in C-2, C-3, and R-2 must appear in the General Notes of all site plans and on all site plan sheets that involve demolition or ground disturbance (including sheeting and shoring and grading) so that on-site contractors are aware of the requirements. Additional statements to be included on the Final Site Plan will be determined in consultation with Alexandria Archaeology.
- C-5 Certificates of Occupancy will not be issued for this property until the final archaeological report has been received and approved by the City Archaeologist.
- C-6 If warranted by the City Archaeologist, the developer will erect a historic marker on the property according to specifications provided by Alexandria Archaeology. The marker will highlight the historical and archaeological significance of the property.
- C-7 If warranted by the City Archaeologist, the developer will produce a booklet for the public on the history and archaeology of the property, according to specifications provided by Alexandria Archaeology.
- C-8 If the project is a federal undertaking, uses federal funding, or requires any federal permit, the applicant should contact the Virginia Department of Historic Resources (VDHR) at 804-367-2323 to start the process to comply with Section 106 of the National Historic Preservation Act. City of Alexandria determinations and requirements may not be the same as those made by VDHR. It is the applicant's responsibility to contact VDHR early to start the Section 106 process so that both the city and state review processes are complimentary.

#### **Police**

Staff note: Staff is not recommending the following recommendations but rather Staff is recommending that the project meet City lighting standards in consultation with the Police as noted in condition #20.

- R-1 Locate lighting systems along walkways to permit pedestrians to see possible risks involved with walking in the hours of darkness. Parking lots should be illuminated so one can identify a human face at 33 feet (3 footcandles vertically above the surface).
- R-2 Illumination should fall throughout the parking area, along the walkway, along the building edge and building entrances.
- R-3 Provide lighting systems that will enhance the ability to observe surroundings.
- R-4 Provide lighting systems that minimize glare, shadow, light pollution, and light trespass.
- R-5 Provide lighting that is even, uniform and does not produce dark areas or sharp contrasts for concealment.
- R-6 When creating uniform lighting consider the type of fixture, the heights of the poles, the direction the light needs to go, and the spacing of the fixtures. The general rule of thumb involving the installation of lighting in parking lots is the height of the light pole multiplied by 4 will give the distance the light poles should be apart.
- R-7 The lamps used throughout the site should be the same. Whether Metal Halide, High Pressure Sodium or another type of light is used, the emphasis is to have the same color of light throughout the site. This will provide good color rendition, help with visibility and reduce contrast.

